APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,542	07/19/2001	Sheng Li	3442P015	1961

8791 7590 09/09/2005	EXAMINER
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	ART UNIT	PAPER NUMBER
SEVENTH FLOOR	2663	
LOS ANGELES, CA 90025-1030		

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/909,542	LI, SHENG
	Examiner	Art Unit	
	Feben M. Haile	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   In view of applicant's amendment filed June 21, 2005, the status of the application is still pending with reference to claims 1-20.

2.   The amendment filed is insufficient to overcome the rejection of claims 1-20 based upon the last Office action because:

Regarding claim 1, the addition: a method for distributing <u>data</u> frames <u>among data packets</u>, comprising: assigning a plurality of consecutive data frames to different data packets, <u>wherein</u> each data packet <u>is to include</u> frames that are sufficiently far apart such that loss of any particular data packet distributes impact that the loss has on quality of recovered data fails to further limit the scope of the claim, therefore the subject matter is not patentable over the prior art of record.

Regarding claim 9, the addition: ... distributing the data frames among a plurality of data packets, <u>wherein</u> each data packet <u>is to include</u> the data frames from different pads of the multimedia entity, where said data frames from different parts are sufficiently spread out among said plurality of data packets to reduce an impact of a packet loss on quality of recovered data compared to packing consecutive data frames into sequential data packets fails to further limit the scope of the claim, therefore the subject matter is not patentable over the prior art of record.

Regarding claim 10, the addition: wherein said multimedia entity includes a video frame, <u>an audio sequence, or a combination thereof</u> fails to further limit the scope of the claim, therefore the subject matter is not patentable over the prior art of record.

Regarding claim 14, the addition: ... a processor configured to assign a plurality of consecutive data frames to different data packets, <u>wherein</u> each data packet <u>is to include</u> data frames that are sufficiently far apart such that loss of any particular data packet distributes impact that the loss has on quality of recovered data ... fails to further limit the scope of the claim, therefore the subject matter is not patentable over the prior art of record.

Regarding claim 17, the addition: a frame assigning element arranged to assign a current data frame in said sequence of data frames to a data packet, where the data packet <u>is to include the current data frame and not to include a previous data frame</u> fails to further limit the scope of the claim, therefore the subject matter is not patentable over the prior art of record.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-5, 8-12, and 14-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Khotimsky et al. (US 6,788,686), hereinafter referred to as Khotimsky.

Regarding claim 1, Khotimsky discloses the limitations: assigning a plurality of consecutive data frames to different data packets (figure 4 shows frames 0-7 assigned to 3 different paths), each data packet including data frames that are sufficiently far

apart such that loss of any particular data packet distributes impact that the loss has on quality of recovered data (figure 4 shows that each path includes frames that are at least 3 frames apart and column 2 lines 47-49).

Regarding claim 2, Khotimsky discloses the limitations: packing said each data packet with assigned frames; and sending the data packets to a destination node (see column 2 lines 31-35).

Regarding claim 3, Khotimsky discloses the limitations: wherein said each data packet includes data frames that are at least two frames apart (figure 4 shows each path includes frames that are at least 3 frames apart).

Regarding claim 4, Khotimsky discloses the limitations: wherein said data frames are audio frames (see column 1 lines 16-21).

Regarding claim 5, Khotimsky discloses the limitations: wherein said assigning distributes data frames into different packets at a uniform interval (figure 4 shows that frames 0-7 are distributed into paths 1-3 at a uniform interval).

Regarding claim 8, Khotimsky discloses the limitations: wherein said assigning plurality of consecutive data frames includes assigning a current data frame of said plurality of consecutive data frames to a packet that is at least two packets away from a packet that contains a previous data frame (figure 4 shows that current frame 3 is assigned to path 1 and previous frame 2 is assigned to path 3; which is 2 paths away).

Regarding claim 9, Khotimsky discloses the limitations: distributing the data frames among a plurality of data packets, each data packet including the data frames from different parts of the multimedia entity (figure 4 shows consecutive frames 0-7

assigned to a 4 different paths), where said data frames from different said plurality of data packets parts are sufficiently spread out among to reduce the impact of a packet consecutive data frames into loss on quality of recovered data compared to packing sequential data packets (figure 4 shows that each path includes frames that are at least 3 frames apart and column 2 lines 47-49).

Regarding claim 10, Khotimsky discloses the limitations: wherein said multimedia entity includes a video frame (see column 1 lines 16-21).

Regarding claim 11, Khotimsky discloses the limitations: wherein said multimedia entity includes a graphical image (see column 1 lines 16-21).

Regarding claim 12, Khotimsky discloses the limitations: wherein said sufficiently spreading out includes packing a data packet with data frames that are at least two frames apart (figure 4 shows each path includes frames that are at least 3 frames apart).

Regarding claim 14, Khotimsky discloses the limitations: a processor configured to assign a plurality of consecutive data frames to different data packets (see figure 11 unit 200 and column 14 lines 12-15), each data packet including data frames that are sufficiently far apart such that loss of any particular data packet distribute impact that the loss has on quality of recovered data (figure 4 shows each path includes frames that are at least 3 frames apart and column 2 lines 47-49); and a packetizer to pack a current frame into a data packet assigned by said processor (see figure 11 unit 230 and see column 14 lines 20-23) .

Regarding claim 15, Khotimsky discloses the limitations: wherein said data frames are audio frames (see column 1 lines 16-21).

Regarding claim 16, Khotimsky discloses the limitations: wherein said data packet includes data frames that are at least two frames apart (figure 4 shows that each path includes frames that are at least 3 frames apart).

Regarding claim 17, Khotimsky discloses the limitations: a frame to receive a sequence of data frames including consecutive parts of a segmented data entity (see figure 11); and a frame assigning element arranged to assign a current data frame in said sequence of data frames to a data packet, where said frame assigning element assigns frame to the data packet different from a data packet containing a previous data frame (see figure 11 unit 200 and column 14 lines 12-15).

Regarding claim 18, Khotimsky discloses the limitations: wherein said segmented data entity is a video frame (see column 1 lines 16-21).

Regarding claim 19, Khotimsky discloses the limitations: wherein said segmented data is and audio sequence (see column 1 lines 16-21).

Regarding claim 20, Khotimsky discloses the limitations: a frame packing element to pack data frames into assigned data packets (see figure 11 unit 230 and see column 14 lines 20-23).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 6, 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over by Khotimsky et al. (US 6,788,686), hereinafter referred to as Khotimsky.

Regarding claim 6, Khotimsky discloses the limitations of base claim 5.

Khotimsky fails to disclose the limitation: wherein the uniform interval is 5.

However, Khotimsky teaches distributing data frames into different paths at a

uniform interval of 3 (figure 4 shows that frames 0-7 are distributed into paths 1-3 at a

uniform interval).

It would have been obvious to one having skill in the art at the time the invention

was made to increase Khotimsky's uniform interval from 3 to 5. The motivation to

amplify the gap between frames in a packet decreases the impact that a lost packet

would have on the quality of recovered data.

Regarding clam 13, Khotimsky discloses the limitations of base claim 9.

Khotimsky fails to disclose the limitation of claim 9 wherein said plurality of data

packets includes at least five packets.

However, Khotimsky teaches the plurality of paths includes at least 3 paths

(figure 4 shows at least 4 paths).

Regarding claim 21, Khotimsky discloses the limitations of base claim 1.

Khotimsky fails to teach wherein said assigning distributes data frames into

different packets in a Gaussian distribution.

However, Khotimsky discloses a fixed or random pattern of assigning segments

to paths 0-3 (Figure 4 and Figure 7).

It would have been obvious to one having skill in the art at the time the invention was made that Khotimsky's fixed or random pattern could have been Gaussian distribution. The motivation being Gaussian distribution deals with probability and probability deals with certain (fixed) or uncertain (random) patterns.

Response to Arguments

5.   Applicant's arguments filed have been fully considered but they are not persuasive:

On page 8, the applicant respectfully argues that the items numbered 0-7 in Figure 4 of Khotimsky are not equivalent to the data frames of claim 1. The examiner respectfully disagrees with the applicant. A frame is a portion of an information segment. Khotimsky discloses that an incoming data flow is partitioned into segments and then transmitted on different paths **(column 1 lines 66-67)**. These partitioned segments are equivalent to the frames disclosed by the applicant.

On page 8, the applicant respectfully argues that the "paths" shown in Figure 4 of Khotimsky are not equivalent to the data packets of claim 1. The examiner respectfully disagrees with the applicant. A packet is a block of data portions. Khotimsky discloses that the segments transmitted in each of the paths constitute packet blocks **(column 9 lines 18-20)**. These packet blocks are equivalent to the data packets disclosed by the applicant.

On pages 8-9, the applicant respectfully requests a reference to specifically address the examiners belief that the limitations discussed with respect to claims 6 and 13 would have been obvious to one having ordinary skill in the art at the time the

invention was made. The examiner respectfully discloses *In re Rose*, 105, which states a modification that involves a mere change in size is recognized as being within the level of ordinary skill in the art.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M. Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 6:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

09/01/2005

RICKY NGO
PRIMARY EXAMINER

9/6/05